t5

Tropical Observation - Current Position - v2.0
Document Version 1.1

Domain Portfolio: Tropical | Domain: Current Conditions | Usage Classification: Standard

Geography: Global **Attribution Required:** N/A **Attribution Requirements:** N/A

Overview

The Tropical Current Position - Active Track API provides the ability to query the current position per active storm. Active storm - any storm that has reported in the last 168 hours.
The Tropical Current Position - Active Track API supports query by Basin, Selected Source, and Storm ID. Note: Storm ID may not be unique and this query may return multiple records.

Note: Storms will only pull from a designated source when calling by stormId.

Note: When leveraging JMA data, the following fields will be populated in Japanese: alternate_storm_name, headline

- **See the common usage and style guide which describes the common elements, error handling, language support, units and terminology used by the Weather Company Data APIs.**
  - **https://ibm.co/APICom**

HTTP Headers and Data Lifetime - Caching and Expiration

For details on appropriate header values as well as caching and expiration definitions, please see **The Weather Company Data | API Common Usage Guide**.

Translated Fields:

This TWC API handles the translation of phrases. However, when formatting a request URL a valid language must be passed along (see the language code table for the supported codes).

- dir_cardinal
- lat_hemisphere
- lon_hemisphere
- storm_dir_cardinal
- storm_sub_type
- storm_type

URL Construction

Atomic API URL Examples:	**Aggregate Product Name**	**v2tropicalCurrentPosition**
Request by Source and Basin: Required Parameters: source, basin, language, format, units, nautical=(true, false) https://api.weather.com/v2/tropical/currentposition?**source=default**&**basin=all**&language=en-US&format=<json or xml>&units=e&nautical=<true or false>&**apiKey=yourApiKey**		
https://api.weather.com/v2/tropical/currentposition?source=default&basin=all&language=en-US&format=json&units=e&nautical=true&apiKey=**yourApiKey**		
Request by Storm ID: Required Parameters: stormId, language, format, units, nautical=(true, false) https://api.weather.com/v2/tropical/currentposition?**stormId=EP022015**&language=en-US&format=<json or xml>&units=e&nautical=<true or false>&**apiKey=yourApiKey**		
https://api.weather.com/v2/tropical/currentposition?stormId=EP052016&language=en-US&format=json&units=e&nautical=true&apiKey=**yourApiKey**		

Valid Parameters

The valid parameter values listed below are unique to this API and are cases sensitive. These parameters support the ability to ‘filter’ the request by the supported sources and basins.

Parameter: source	
Valid Parameter Value	Description
default	Data returned is limited to a TWC selected source for that basin. As additional sources are added worldwide, the default source for a particular basin may change.
all	Data returned for all sources for that basin.
Parameter: basin	
Valid Parameter Value	Description
all	Data returned for all supported basins (listed below).
AL	Atlantic Ocean
CP	Central Pacific
EP	Eastern Pacific Ocean
IO	Indian Ocean
SH	Southern Hemisphere
WP	Western Pacific

Nautical Parameter

If nautical=true, then any measurement that could be represented as knots is, regardless of the units parameter. Anything that is not subject to nautical form is left in the requested units (which is why you see pressures switch back and forth with units even when nautical=true)

units=e&nautical=true will give pressures in inches-of-mercury and speeds in knots units=m&nautical=true will give pressures in millibars and speeds in knots units=e&nautical=false will give pressures in inches-of-mercury and speeds in mph units=m&nautical=false will give pressures in millibars and speeds in kph

Wind Averaging Period

Governmental organizations providing tropical data use different periods of time when averaging wind values. The United States uses 1 minute values, New Delhi uses 3 minute values and all others use a 10 minute value. This applies to the following fields found in the payload

Current Position : wind_radii

Data Elements & Definitions

Field Name	Description	Type	Range	Sample	Nulls Allowed
Advisory Info Object					
alternate_storm_name	'Storm-name' populated in Japanese when data is fromJ MA. Otherwise will be'null'	string		null	Y
storm_key	Unique storm identifier through life of the storm	string		a87e1880a4870ae1b7d21049151d5edfa4e1011e	N
storm_number	Given for only named storms leveraging JMA data. Othewise null	integer		null	Y
storm_id	Storm id. Format will vary by source. Not unique globally	string		EP022002	N
storm_name	Name assigned by issuing agency. Named storms are in proper case	string		Alberto	N
source	Issuing Agency	string	NHC, CPHC, JTWC	NHC	N
basin	Basin identifier.	string	AL, CP, EP, IO, SH, WP NHC reports for: AL and EP CPHC report for CP JTWC reports for: EP, CP, IO, SH, WP	EP	N
dsgnt_source	true if a TWC selected provider	boolean	true or false	TRUE	N
issue_office	office issuing bulletin	string		KNHC	N
pil	The Product Identification Label advisory issued by the NHC, WPC or JTWC.	string	TCP, TCM, TCU, TCW currently - will expand with future releases	TCP	Y
wmo_id	For sources NHC, WPC and JTWC this data field will contain a value	string		WTPZ34	Y
bulletin_id	Internal use only	string		a87e1880a4870ae1b7d21049151d5edfa4e1011e	N
related_bulletin_id	Internal use only	string		a87e1880a4870ae1b7d21049151d5edfa4e1011f	N
issue_dt_tm	Time Issuing Agency creates the bulletin	date	ISO 8601 – YYYY-MM-DDTHH:MI:SS±HHMI or Z	2015-01-13T01:00:00-00:00	N
issue_dt_tm_tz_cd	IANA code for issue_dt_tm	string		America/New_York	N
issue_dt_tm_tz_abbrv	Time zone abbreviation for issue_dt_tm	string		EDT	N

process_time_gmt	Time SUN processed bulletin	epoch		1421175600	N
adv_num	Issuing Agency advisory number	string		12A	Y
adv_dt_tm	Advisory time	date	ISO 8601 – YYYY-MM-DDTHH:MI:SS±HHMI or Z	2015-01-13T10:00:15-08:00	N
adv_dt_tm_tz_cd	IANA code for adv_dt_tm	string		America/New_York	N
adv_dt_tm_tz_abbrv	Time zone abbreviation for adv_dt_tm	string		EDT	N
nxt_cmplt_advsry_dt_tm	Anticipated next advisory issue time. Is null if final_advisory = true OR we could not extract next update time	date	ISO 8601 – YYYY-MM-DDTHH:MI:SS±HHMI or Z	2015-01-13T10:00:00-08:00	Y
nxt_cmplt_advsry_dt_tm_tz_cd	IANA code for nxt_cmplt_advsry_dt_tm	string		America/New_York	Y
nxt_cmplt_advsry_dt_tm_tz_abbrv	Time zone abbreviation for nxt_cmplt_advsry_dt_tm	string		EDT	Y
nxt_intrmdt_advsy_dt_tm	Anticipated next public advisory issue time. Is null if final_advisory = Y OR we could not extract next update time	date	ISO 8601 – YYYY-MM-DDTHH:MI:SS±HHMI or Z	2015-01-13T10:00:00-08:00	Y
nxt_intrmdt_advsy_dt_tm_tz_cd	IANA code for nxt_intrmdt_advsy_dt_tm	string		America/New_York	Y
nxt_intrmdt_advsy_dt_tm_tz_abbrv	Time zone abbreviation for nxt_intrmdt_advsy_dt_tm	string		EDT	Y
final_advisory	Indicates the final advisory issued from the primary source. The value only mirrors the indication within an advisory itself that it is the final advisory. However, it is possible that an issuing office may reissue an advisory if the storm moves back into their area of responsibility.	boolean	true or false. Currently the primary source is NHC. Other primary sources will be added as basins are added	false	N
alternate_final_advisory	Indicates final advisory issued from alternate source	boolean	true or false. Currently the alternate source is WPC. Other alternate sources will be added as basins are added		N
expire_time_gmt	168 hours past the last advisory time. Suggested removal time.	epoch		1421175600	N
Current Position Object					
lat	Current latitude of the storm	decimal	Negative if in the Southern Hemisphere	42.50	N
lat_hemisphere	Latitude hemisphere	string	N,S	N	N
lon	Current longitude of the storm	decimal	Negative if in the Western Hemisphere	-59.80	N
lon_hemisphere	Longitude hemisphere	string	E,W	W	N
storm_number	Given for only named storms leveraging JMA data. Othewise null	integer		null	Y
storm_type_cd	Encoded storm type	string	TD, TS, HU, SS, PT, RO, SD, EX, LOW, PTC, TY, ST, TC,	HU	N
storm_type	Storm type	string	NHC, WPC storm types: Tropical Depression, Tropical Storm, Hurricane, Subtropical Storm, Post-tropical cyclone, Remnants of, Subtropical Depression, Extratropical, Extra Tropical Low, Potential Tropical Cyclone JTWC storm types: Typhoon, Super Typhoon, Tropical Cyclone,	Hurricane	N
storm_sub_type_cd	Encoded storm sub type	string	1, 2, 3, 4, 5	1	Y
storm_sub_type	Storm sub type	string	Category 1 Hurricane Category 2 Hurricane Category 3 Hurricane	Category 1 Hurricane Note:	Y

			Category 4 Hurricane Category 5 Hurricane Category 1 Tropical Cyclone Category 2 Tropical Cyclone Category 3 Tropical Cyclone Category 4 Tropical Cyclone Category 5 Tropical Cyclone Cyclonic Storm Severe Cyclonic Storm Very Severe Cyclonic Storm Extremely Severe Cyclonic Storm Super Cyclonic Storm	In EP, CP, and AL, only storm_type=HU (Hurricane) has a sub_type In WP, no storm_type has a sub_type In IO and SH, storm_type=TC (Tropical Cyclone) has a sub_type. If storm_type=TC in another basin, it will not have a sub_type.	
headline [list]	List of headlines. [list]	object	For NHC data headline is US English only and will be populated when available (Pil = TCP and TCU). For JTWC the data headline will be null.		Y
	Headline extracted from bulletin	string	Always upper case	HURRICANE CONDITIONS EXPECTED TODAY	N
min_pressure	Minimum central pressure	decimal		29.50	Y
max_sustained_wind	Maximum sustained winds	integer		45	N
wind_gust	Wind gusts	integer		70	Y
heading	Heading information for the storm	object			N
storm_dir	Current direction of the storm in degrees	string	0 to 360 or stationary or drifting, meandering	340	N
storm_dir_cardinal	Cardinal wind direction	string	N, S,E,W, NNE, NE,ENE,ESE, SE, SSE, SSW, SW, WSW, WNW, NW,NNW, Stationary, Drifting , Meandering	NNW	N
storm_spd	Forward speed of the storm	integer		12	Y
nearby_loc	Geographical references for a storm. [list of objects]	object	Only populated from TCP and TCU bulletin. For JTWC the data headline will be null.		Y
loc_nm	Location name	string	Always upper case	CAPE HATTERAS NORTH CAROLINA	N
dist	Distance from the center of the storm	integer		240	Y
dir_cardinal	Direction of loc_nm from the center of the storm	string	N, S,E,W, NNE, NE,ENE,ESE, SE, SSE, SSW, SW, WSW, WNW, NW,NNW, Stationary, Drifting , Meandering	N	Y
city_nm	Nearest city	string	Only for CONUS. Always in proper case	Cape Hatteras	Y
st_cd	Nearest state	string	Only for CONUS. Always in upper case	NC	Y
wind_radii	Storm wind radius values. [list of objects]	object			Y
radii_wspd	Wind speed for the associated quadrant	integer		64	N
NE	Distance from the center of the storm in the NE quadrant where radii_wspd begin	integer		75	N
SE	Distance from the center of the storm in the SE quadrant where radii_wspd begin	integer		75	N
SW	Distance from the center of the storm in the SW quadrant where radii_wspd	integer		80	N

	begin				
NW	Distance from the center of the storm in the NW quadrant where radii_wspd begin	integer		80	N
sea_radii	Wave Height Radius Values Object	object			Y
wave_height	Wave height for the associated quadrant	integer		12	N
NE	Distance from the center of the storm in the NE quadrant where wave_height values begin	integer		75	N
SE	Distance from the center of the storm in the SE quadrant where wave_height values begin	integer		75	N
SW	Distance from the center of the storm in the SW quadrant where wave_height values begin	integer		80	N
NW	Distance from the center of the storm in the NW quadrant where wave_height values begin	integer		80	N

JSON Sample


```
{
"metadata": {
"language": "en-US",
"transaction_id": "1465842536928:-658417609",
"version": "2",
"nautical": "true",
"units": "e",
"basin": "EP",
"source": "default",
"expire_time_gmt": 1465864137,
"status_code": 200
},
"advisoryinfo": [
{
"storm_key": "90455b3b3abdeb027b03da275751b075",
"storm_id": "EP012016",
“storm_number” null
"storm_name": "One-E",
“alternate_storm_name”: null,
"source": "NHC",
"dsgnt_source": true,
"basin": "EP",
"issue_office": "KNHC",
"wmo_id": "WTPZ31",
"pil": "TCP",
"bulletin_id": "88488F924CEC18AD5E9D86916C551E11",
"related_bulletin_id": "10ACA5E74519E855204B6A7A00958510",
```

```
"issue_dt_tm": "2016-06-08T14:34:00Z",
"issue_dt_tm_tz_cd": "Etc/UTC",
"issue_dt_tm_tz_abbrv": "UTC",
"adv_num": "8",
"adv_dt_tm": "2016-06-08T10:00:00-05:00",
"adv_dt_tm_tz_cd": "America/Chicago",
"adv_dt_tm_tz_abbrv": "CDT",
"nxt_cmplt_advsry_dt_tm": null,
"nxt_cmplt_advsry_dt_tm_tz_cd": null,
"nxt_cmplt_advsry_dt_tm_tz_abbrv": null,
"nxt_intrmdt_advsry_dt_tm": null,
"nxt_intrmdt_advsry_dt_tm_tz_cd": null,
"nxt_intrmdt_advsry_dt_tm_tz_abbrv": null,
"process_time_gmt": 1465403223,
"expire_time_gmt": 1466002800,
"final_advisory": true,
"alternate_final_advisory": false,
"currentposition": {
"lat": 16.4,
"lat_hemisphere": "N",
"lon": -94.8,
"lon_hemisphere": "W",
"storm_type_cd": "RO",
"storm_type": "Remnants Of",
"storm_sub_type_cd": null,
"storm_sub_type": null,
"headline": [
"DEPRESSION DISSIPATES ALONG THE SOUTHEASTERN MEXICO COASTLINE"
],
"min_pressure": 29.77,
"max_sustained_wind": 20,
"wind_gust": 30,
"heading": {
"storm_dir": "360",
"storm_dir_cardinal": "N",
"storm_spd": 3
},
"nearby_loc": [
{
"loc_nm": "SALINA CRUZ MEXICO",
"dist": 26,
"dir_cardinal": "ENE",
"city_nm": null,
"st_cd": null
```

```
}
],
"wind_radii": [],
"sea_radii": null
}
}
]
}
```